

Standard Operating Procedure for Radiation Safety/Radiation Safety Officer Duties

1.0 Location

Room 306

2.0 Purpose

To Inform and protect personnel working in this area.

3.0 Reference

Current North Dakota Radiological Health Rules

4.0 Procedures

4.1 Radiation Safety Procedures

4.1.1 A radioactive material inventory must be done every 6 months, and documented in the Radioactive Materials Logbook.

4.1.2 Leak tests are required on the Nickel 63 sources in the gas chromatographs every 6 months, and documentation is kept in the Radioactive Materials License.

4.1.3 Contamination Control

4.1.3.1 Do not mouth pipette radioactive materials.

4.1.3.2 Do not eat, drink, smoke, or apply cosmetics where radioactive materials are used.

4.1.3.3 All radiological work should be done in a designated, posted laboratory area.

4.1.3.4 Use protective gloves and lab coats when handling radioactive materials.

4.1.3.5 Thoroughly wash hands after handling radioactive materials.

4.1.4 Radioactive Spills Cleanup

- 4.1.4.1 Spills should be quickly wiped up and the contaminated cleaning materials placed in radioactive waste. Cleanup should be performed while wearing disposable protective covering prior to testing.
- 4.1.4.2 For containment, place absorbent material around the edges of the spill.
- 4.1.4.3 Blot up as much of the spilled material as possible, placing soaked materials in a waste bag.
- 4.1.4.4 Wash the area with dilute Contrad 70 solution. Wipe a small portion of the area with a dry filter paper and count by liquid scintillation.
- 4.4.4.5 The amount of removable activity should be less than twice background.

4.2 Duties of the Radiation Safety Officer

- 4.2.1 Maintain license and all records.
- 4.2.2 Order all radioactive materials.
- 4.2.3 Inventory and leak test radioactive material every 6 months.
- 4.2.4 Train new employees.
- 4.2.5 Keep log and records of safety training.
- 4.2.6 Perform counting and reporting of leak/wipe tests.
- 4.2.7 Supervise to ensure that licensed material is properly secured against unauthorized removal at all times.
- 4.2.8 Development of operating and emergency procedures.
- 4.2.9 Provide advice and help for accidents and emergencies.
- 4.2.10 Maintain supplies, such as radiation safety supplies, radiation signs, tapes, and labels.

- 4.2.11 Conduct annual review to ensure compliance with the rules and license conditions.